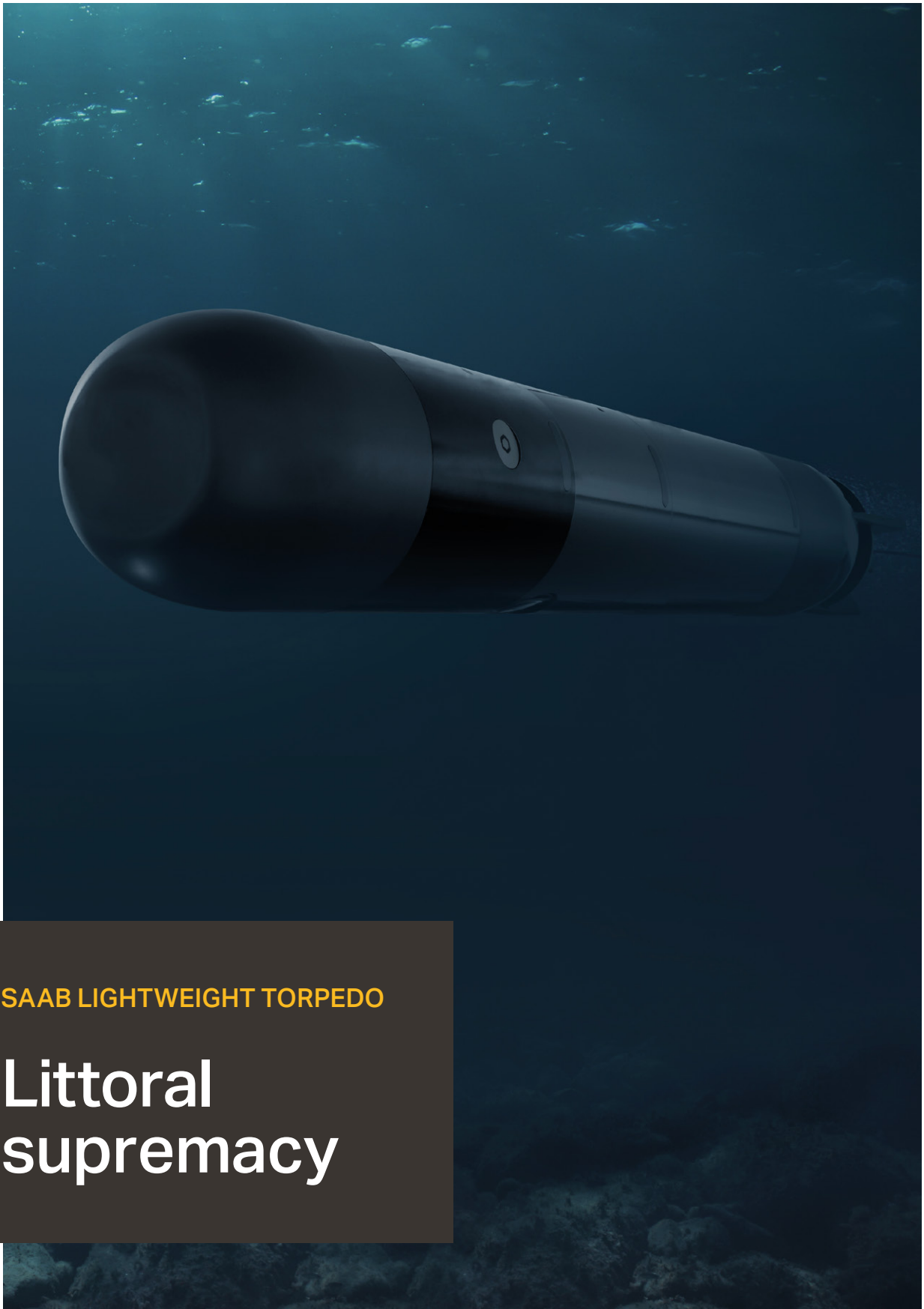




SAAB



SAAB LIGHTWEIGHT TORPEDO

**Littoral
supremacy**

Command littoral waters

Saab's Lightweight Torpedo (SLWT) is an anti-submarine warfare solution that gives you total control within the challenging littoral environment.

For over 25 years, SLWT has been helping nations to defend their waters. As a result, it offers best-in-class capabilities today, whilst also being ready for tomorrow.

Originally developed for the Swedish Navy, the electrically propelled solution incorporates a fully digital homing system, ensuring ultimate impact.

Operational in any conditions

SLWT operates equally well in both shallow and blue water, as well as under cold, warm or brackish conditions.

State-of-the-art design ensures optimal performance in difficult hydroacoustic situations, with near-neutral buoyancy enabling advanced manoeuvrability and low speeds. The torpedo also

has minimal undershoot to allow launches in shallow waters.

Both a fire-and-forget and wire-guided torpedo, SLWT enables the operator to manually navigate narrow passages and complex terrain when required. If the wire breaks, the torpedo can continue its mission, or abort and swim to the seabed.

Strike from air, land and sea

The versatile system can be launched from aircraft, surface ships and submarines, operating in both anti-surface and anti-submarine roles.

Aircraft launch

- Launcher remotely operated
- Unit load is prepared at an aircraft base
- Torpedo is released by force of gravity

Helicopter launch

- Launcher remotely operated
- Unit load is prepared at a helicopter base
- Torpedo is released by force of gravity

Ship launch

- Torpedo tube launcher remotely operated

- Unit load is prepared at a naval base for rapid deployment
- Torpedo is ejected by a compressed air system

Submarine launch

- Integrated torpedo tube launcher
- Tube is part of the submarine system
- Release via a passive swim-out procedure, or active ejection launch system

Improvised launch

- Launched by manually operated chutes
- Unit load is prepared at a military base for rapid deployment



The power to strike

-  DEEP BLUE
-  OPERATIONAL AT ANY DEPTH
-  SHALLOWS



1 Navigate any obstacle

SLWT can navigate any obstacle in its path. Waypoint guidance can be employed in two ways: interactively and autonomously. Interactive waypoint guidance can be used to provide the torpedo with real-time commands for speed, direction and depth, while the autonomous setting allows you to upload preprogrammed behaviour to the torpedo before launch.

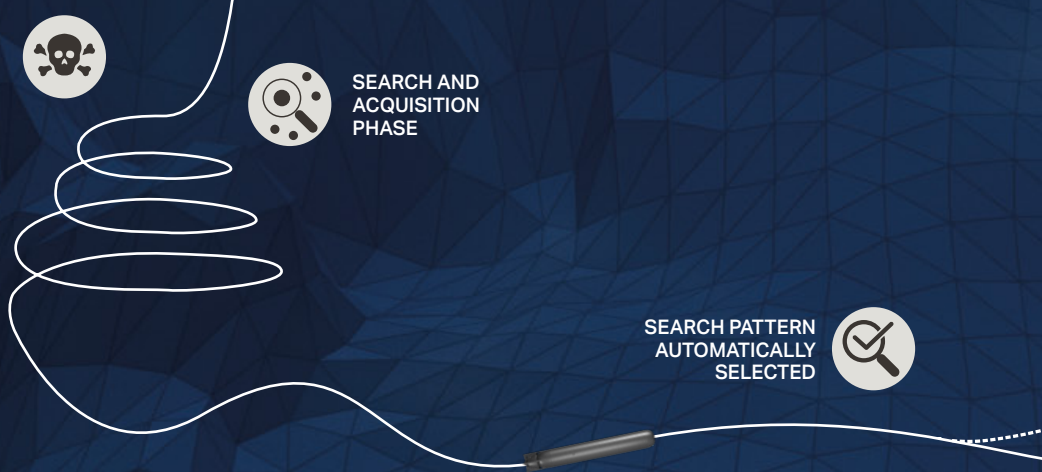
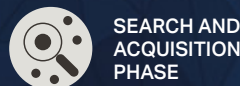
SLWT's sophisticated guidance technology can even be used to engage targets in close proximity to friendly units.



2 Complete control

If an unexpected situation arises, wire guidance allows the operator to take control. The operator can dynamically alter the attack volume, assist the torpedo in complex environments, and abort the mission at the last minute. However, the torpedo can also operate effectively without support.

The advanced operability offered by wire guidance also means that SLWT can effectively avoid enemy countermeasures and identify and avoid false targets.



5

Mission evaluation

The exact same SLWT system that is used in real-world engagements can easily be used for training exercises – supporting outstandingly realistic, cost-effective anti-submarine warfare training. Recorded data allows for evaluation, while a flotation device enables recovery.

Data tracked by the torpedo's recording system can be uploaded to the supplied T-MATE computer system and interpreted using the in-built engagement evaluation tool, DART.



FIND OUT MORE WITH OUR INTERACTIVE INFOGRAPHIC



TRAINING

4

Inescapable impact

When it comes to final guidance, the torpedo's actions will differ depending on the nature of the target. If the target is a surface ship, the SLWT will pass beneath it at a predefined depth before detonating by means of a proximity fuse. The torpedo can also be instructed to initiate the warhead via an impact sensor upon collision with the ship if required.

If the target is a submerged submarine, the torpedo will steer itself in order to collide with the submarine's hull. The warhead is then detonated by use of the impact sensor. If the submarine is surfaced, the SLWT can be instructed to detonate at a predetermined depth via the proximity fuse.

The warhead itself is an omnidirectional bulk charge. It inflicts severe, catastrophic damage on the intended target by using a combination of bubble pulse oscillations and shock waves.

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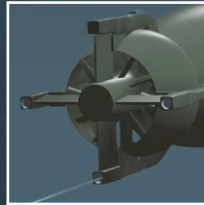
Accuracy guaranteed

Once SLWT has entered the attack volume, it will automatically select an attack pattern depending on the nature of the target, while the wire guidance system also provides the option to seek out targets manually.

Based on factors such as speed, size and strength, algorithms determine whether a target is valid, with the operator able to override any outcome. The torpedo then automatically steers to optimally intercept a valid target; if the criteria for warhead detonation are not met, renewed attempts will be made until a target is engaged.

System specifications

Length	2,850 mm
Diameter	400 mm
Weight	approx. 340 kg
Speed	10- to 40+ kts
Endurance	20+ km, 1+ hrs
Depth	300+ m
Homing system	active/passive, fully digital sonar
Proximity fuse	multi-beam sonar
Propulsion	pumpjet (ducted rotor/stator)
Energy	lithium-based rechargeable battery
Warhead	IM compliant, omnidirectional, PBX
Communication	galvanic wire/optic fibre



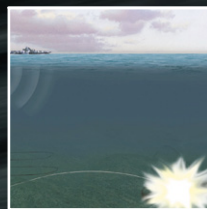
Propulsion and communication systems

State-of-the-art ducted pumpjet design for silent and energy-efficient propulsion. Galvanic wire or optic fibre for communication throughout the engagement.



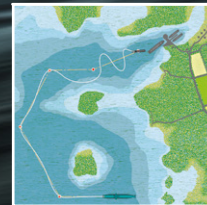
Homing system

Forward-looking sonar and sonar electronics for detection, classification and tracking of targets.



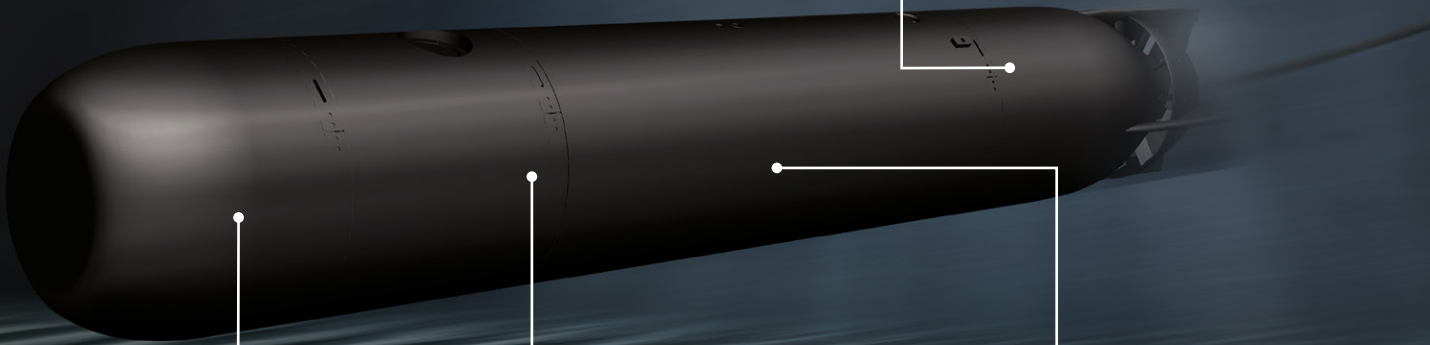
Warhead system

Detachable warhead module that can be replaced with an exercise module for training purposes.



Computer system

On-board computer for sensor data processing, and vehicle control and supervision.



From adverse weather to complex seabed topography, the littorals pose numerous challenges. Developed with our **thinking edge** in mind, Saab's Lightweight Torpedo gives you the power to dominate this domain.



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